

# Thermo Scientific HPLC and UHPLC Systems: LC Portfolio for LC-MS Applications

Column ID: 50  $\mu\text{m}$  75  $\mu\text{m}$  150  $\mu\text{m}$  300  $\mu\text{m}$  0.5 mm 1.0 mm ...2.1–4.6 mm

Nano: <1.5  $\mu\text{L}/\text{min}$

Capillary: 1–15  $\mu\text{L}/\text{min}$

Micro: 10–100  $\mu\text{L}/\text{min}$

Analytical: >100  $\mu\text{L}/\text{min}$



Thermo Scientific™  
UltiMate™ 3000 RSLCnano System



Thermo Scientific™  
Vanquish™ Horizon System

Based on recommended flow rate

50 nL/min–50  $\mu\text{L}/\text{min}$

50  $\mu\text{L}/\text{min}$ –5 mL/min

100–1000  
nL/min

100  $\mu\text{L}/\text{min}$ –8 mL/min



Thermo Scientific™  
EASY-nLC™ 1200 System

Thermo Scientific™  
Vanquish™ Flex Systems









Thermo Scientific™  
UltiMate™ 3000  
Systems

Sensitivity

Throughput

Thermo Scientific LC Portfolio Overview

HPLC Systems		UHPLC Systems									
Routine analysis		Low-flow	Flexibility, more performance and method development	Research and high throughput							
<p><b>Thermo Scientific™ UltiMate™ 3000 Basic Automated Systems</b></p> <ul style="list-style-type: none"> <li>Highly economic and reliable</li> </ul> 		<p><b>Thermo Scientific™ UltiMate™ 3000 SD Systems</b></p> <ul style="list-style-type: none"> <li>Workhorse for standard HPLC applications</li> </ul> 		<p><b>Thermo Scientific™ Vanquish™ Duo System Workflows</b></p> <hr/> <p><b>Thermo Scientific™ UltiMate™ 3000 RSLCnano System</b></p> <p><b>Thermo Scientific™ EASY-nLC™ 1200 System</b></p> <ul style="list-style-type: none"> <li>UHPLC systems for Nano/Cap/Micro range</li> <li>Ideal front-end for proteomics applications</li> </ul> 			<p><b>Thermo Scientific™ UltiMate™ 3000 RS/BioRS Systems</b></p> <ul style="list-style-type: none"> <li>Specialty workflow support</li> <li>Binary and Quaternary UHPLC systems</li> </ul> 		<p><b>Thermo Scientific™ Vanquish™ Flex Systems</b></p> <ul style="list-style-type: none"> <li>High pressure binary and low pressure quaternary solvent mixing options</li> <li>Two thermostating modes</li> <li>Biocompatible</li> <li>Integration of multiple detection technologies</li> </ul>  <p><b>BioScience Resource Innovation Award 2016</b></p>		<p><b>Thermo Scientific™ Vanquish™ Horizon System</b></p> <ul style="list-style-type: none"> <li>High pressure binary solvent mixing</li> <li>Industry-leading precision and accuracy</li> <li>Two thermostating modes</li> <li>Unmatched detection sensitivity</li> <li>Biocompatible</li> <li>Integration of multiple detection technologies</li> </ul>  <p><b>Analytical Scientist Innovation Award 2014</b></p> <p><b>Scaled Solutions 2014 WINNER</b></p>
620 bar		800–1200 bar		Up to 1000 bar		1500 bar					

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